CLAIMS

I claim:

1. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 6-9.

2. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of :

(a) sequences having at least 75% identity to a sequence of SEQ ID NO: 6-9;

(b) sequences having at least 90% identity to a sequence of SEQ ID NO: 6-9; and

(c) sequences having at least 95% identity to a sequence of SEQ ID NO: 6-9,

wherein the polypeptide is capable of eliciting and/or enhancing an immune response.

3. An isolated polynucleotide encoding a polypeptide according to any one of claims 1 and 2.

4. An isolated polynucleotide comprising a sequence selected from the group consisting of:

(a) SEQ ID NO: 1-5;

(b) sequences having at least 75% identity to a sequence of SEQ ID NO: 1-5;

(c) sequences having at least 90% identity to a sequence of SEQ ID NO: 1-5; and

(d) sequences having at least 95% identity to a sequence of SEQ ID NO: 1-5.

5. An expression vector comprising a polynucleotide according to claim 4.

6. A host cell transformed with an expression vector according to claim 5.

7. An immunogenic composition comprising at least one polypeptide according to any one of claims 1 and 2 and a heterologous antigen.

8. The immunogenic composition of claim 7, wherein the heterologous antigen is selected from the group consisting of: tumor-specific antigens; infectious disease antigens; and autoantigens.

9. An immunogenic composition comprising at least one polynucleotide according to claim 4 and a heterologous antigen.

10. The immunogenic composition of claim 9, wherein the heterologous antigen is selected from the group consisting of: tumor-specific antigens; infectious disease antigens; and autoantigens.

11. A method for modulating an immune response in a patient, comprising administering an immunogenic composition according to any one of claims 7 and 9.

12. The method of claim 11, wherein the immune response is a Th1 response.

13. The method of claim 11, wherein the immune response is a Th2 response.

14. A method for enhancing a Th1-type immure response, comprising administering an isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) sequences of SEQ ID NO: 7 and 8;

(b) sequences having at least 75% identity to a sequence of SEQ ID NO: 7 and 8;

(c) sequences having at least 90% identity to a sequence of SEQ ID NO: 7 and 8; and

(d) sequences having at least 95% identity to a sequence of SEQ ID NO: 7 and 8.

15. A method for enhancing a Th2-type immure response, comprising administering a polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) SEQ ID NO: 3;

(b) sequences having at least 75% identity to SEQ ID NO: 3;

(c) sequences having at least 90% identity to SEQ ID NO: 3; and

(d) sequences having at least 95% identity to SEQ ID NO: 3.

16. A method for treating a disorder characterised by a Th2 immune response, comprising administering an isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) sequences of SEQ ID NO: 4 and 5;

(b) sequences having at least 75% identity to a sequence of SEQ ID NO: 4 and 5;

(c) sequences having at least 90% identity to a sequence of SEQ ID NO: 4 and 5; and

(d) sequences having at least 95% identity to a sequence of SEQ ID NO: 4 and 5.

17. The method of claim 16, wherein the disorder is selected from the group consisting of: mycobacterial infections: sarcoidosis: asthma: allergic rhinitis: chronic graft versus host disease: systemic lupus erythematosus: systemic sclerosis: and cancer.

18. A method for treating a disorder characterised by a Th1 immune response, comprising administering a polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) SEQ ID NO: 3;

(b) sequences having at least 75% identity to SEQ ID NO: 3;

(c) sequences having at least 90% identity to SEQ ID NO: 3; and

(d) sequences having at least 95% identity to SEQ ID NO: 3.

19. The method of claim 18, wherein the disorder is selected from the group consisting of: tuberculosis; autoimmune thyroiditis; insulin-dependent diabetes mellitus; multiple sclerosis; Crohn's disease; *Helicobacter pylori*-induced peptic ulcers; transplanted organ rejection and unexplained naturally-occurring abortions.

20. A fusion protein comprising at least one polypeptide according to any one of claims 1 and 2 and a heterologous antigen.

21. The fusion protein of claim 20, wherein the heterologous antigen is selected from the group consisting of: tumor-specific antigens; infectious disease antigens; and autoantigens.

22. A method for modulating an immune response in a patient, comprising administering a fusion protein according to claim 20.